

June 8, 1949.

Mr. Arnold Ravin,  
Dept. Zoology,  
Columbia University,  
New York 27, N.Y.

Dear Ravin,

Thank you for the detailed account of your work on the citrate-positive mutant.

To take up what seems to be a sore point first, my records show that a reprint of "Problems in Microbial Genetics" was sent you some time ago, c/o Dept. Zoology, or possibly of Dr. Ryan. Before I can send you a duplicate copy out of our very limited and depleted supply, please check on the possibility that it was misdirected within the department, or in the mail receiving room. Dr. Ryan has copies of some of my older papers which he might give you; if you will then let me know what you are still lacking, I will do my best to accomodate.

The C<sub>7</sub> culture which you gave me grows exceedingly poorly on EMB medium and is clearly different in its cultural behavior from any of the glucose-negative mutants I have run across so far. However, I have not yet tested any of our cultures for citrate-utilization.

All of our fermentation mutants have been obtained by irradiating EMB-sugar plates, spread with ca.  $10^8$  bacteria, and picking the mutants which appear as pink sectors or colonies with a frequency of about  $3 \times 10^{-4}$ .

I don't recall whether *Alcaligenes fecalis* grows on citrate, but the C<sub>7</sub> mutant would seem to resemble it in other respects.

Sincerely,

Joshua Lederberg,  
Assistant Professor of Genetics.